ANNEXE I

BlueFin Tuna Purse Seine Fishing Vessels

LOA ≥ 20 m

Technical specifications of selected operative and projected ships by nationality.

French Last Generation Type BFT PS Vessels

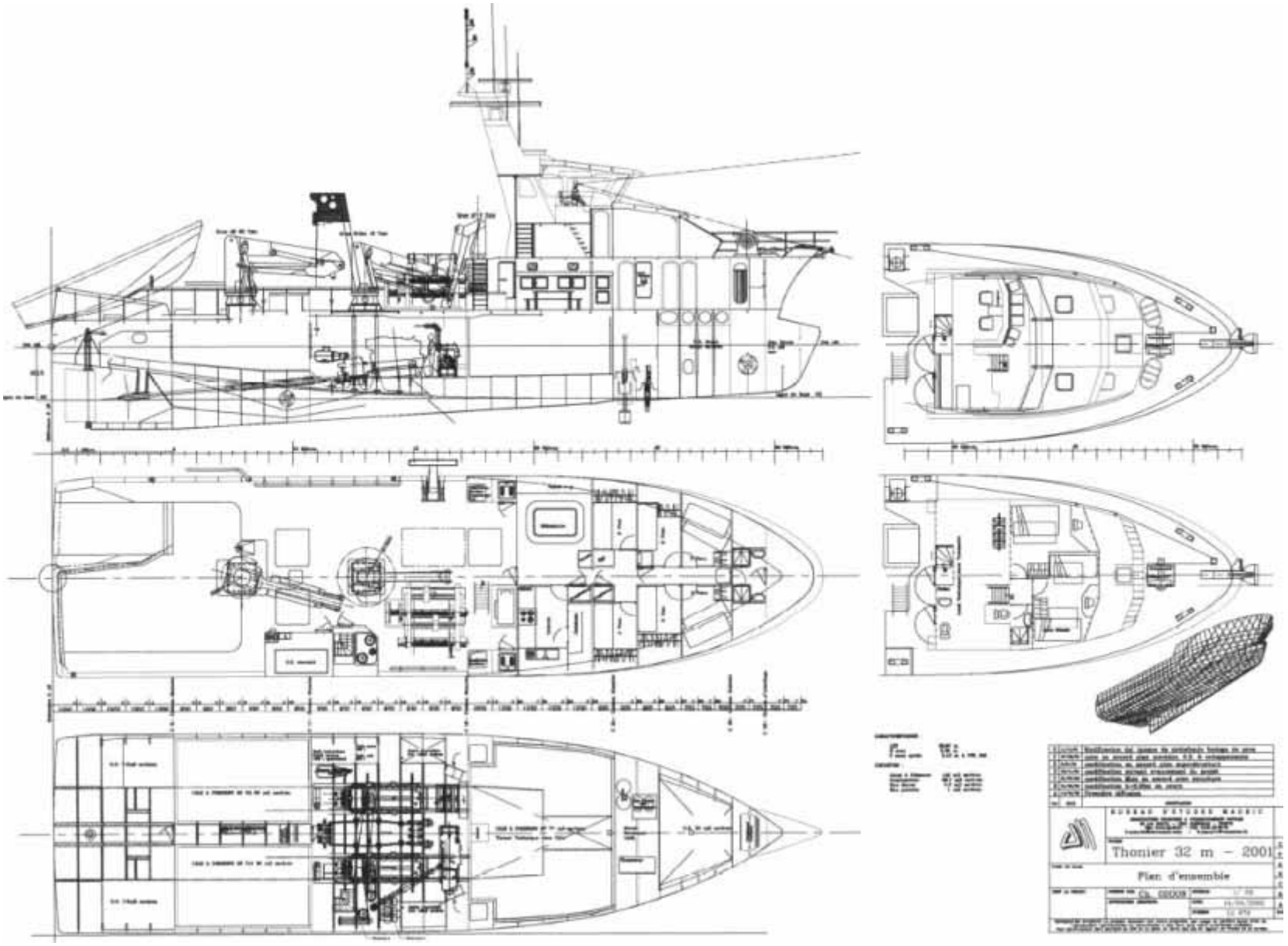


Figure: 001. Mediterranean type French PS tuna fishing vessel Cisberlande V built by Astilleros Armon, SA (Length: 32m, Beam: 8,25m, Max. draught: 3,25m, building: Steel hull, Alu. Superstructures, Holds capacity: 70m³ & x2 29m³)

Figure: 002. Mediterranean type French PS tuna fishing vessel Cisberlande V built by Astilleros Armon, SA (Length: 32m, Beam: 8,25m, Max. draught: 3,25m, building: Steel hull, Alu. Superstructures, Holds capacity: 70m³ & x2 29m³) Pictures ©® by: M.S.P.A.P.

Project No: 2031
Vessel Name: PIERRE JOSEPH SALVADOR
Vessel Description: Tuna Fishing Vessel
LOA - 41,50 m
Breadth - 9,00 m
Depth - 3,95 m
Draught (design) - 3,50 m
Main Engine -1 x CAT 3512 B High Displacement
Works Carried Out: All Necessary Works for Turn Key Delivery
Classification Society: BV, French Port Authority
Delivered in: 2005
Owner: SNC Armament Rosine Arthur

Project No: 2030
Vessel Name: PROVENCE COTE D'AZUR II
Vessel Description: Tuna Fishing Vessel
LOA - 41,50 m
Breadth - 9,00 m
Depth - 3,95 m
Draught (design) - 3,50 m
Main Engin - 1 x CAT 3512 B High Displacement
Works Carried Out: All Necessary Works for Turn Key Delivery
Classification Society: BV, French Port Authority
Delivered in: 2005
Owner: Provence Cote D'azur

Project No: 2029
Vessel Name: MARCAL III
Vessel Description: Tuna Fishing Vessel
LOA - 41,50 m
Breadth - 9,00 m
Depth - 3,95 m
Draught (design) - 3,50 m
Main Engine - 1 x CAT 3512 B High Displacement
Works Carried Out: All Necessary Works for Turn Key Delivery
Classification Society: BV, French Port Authority
Delivered in: 2005
Owner: Marc Carreno

Spanish Last Generation Type BFT PS Vessel

Figure: 003. Mediterranean type (Aresa 40) Spanish PS tuna fishing vessel Gepus built by Astilleros. Drassanes D'Arenys de Mar, Barcelona. Pictures ©® (Top) by: ATRT,SL

The vessel Aresa 40 A has been specially designed for red tuna fishing in the Mediterranean. This vessel is equipped with the latest fish detection technology. It has sonar and a probe for detecting fish. It also has high powered binoculars located in the lookout tower. All of this makes the Aresa 40 A multi-faceted tuna boat.

The Aresa 40 has a semi-deployable hull with excellent water lines and sensational navigability and maneuverability that make this vessel a perfect tool for fishing the fasted fish in all the world´s oceans.

Additionally, this boat is the only one in all of Europe made from a "Female" mold. This enables several identical units to be manufactured with high quality finishings. The Aresa 40 A may also be built for any kind of fishing be it purse-seine, fishing line or trawling among other methods.

Tecnichal Caracteristics

Lenght:	40,00m
Beam:	8,30m
Depth:	3,50m
Motorization:	3000 Hp
Fuel:	41.000l
Fresh Water:	13.200l
Máxim Speed:	18 Knt.

Italian Last Generation Type BFT PS Vessels

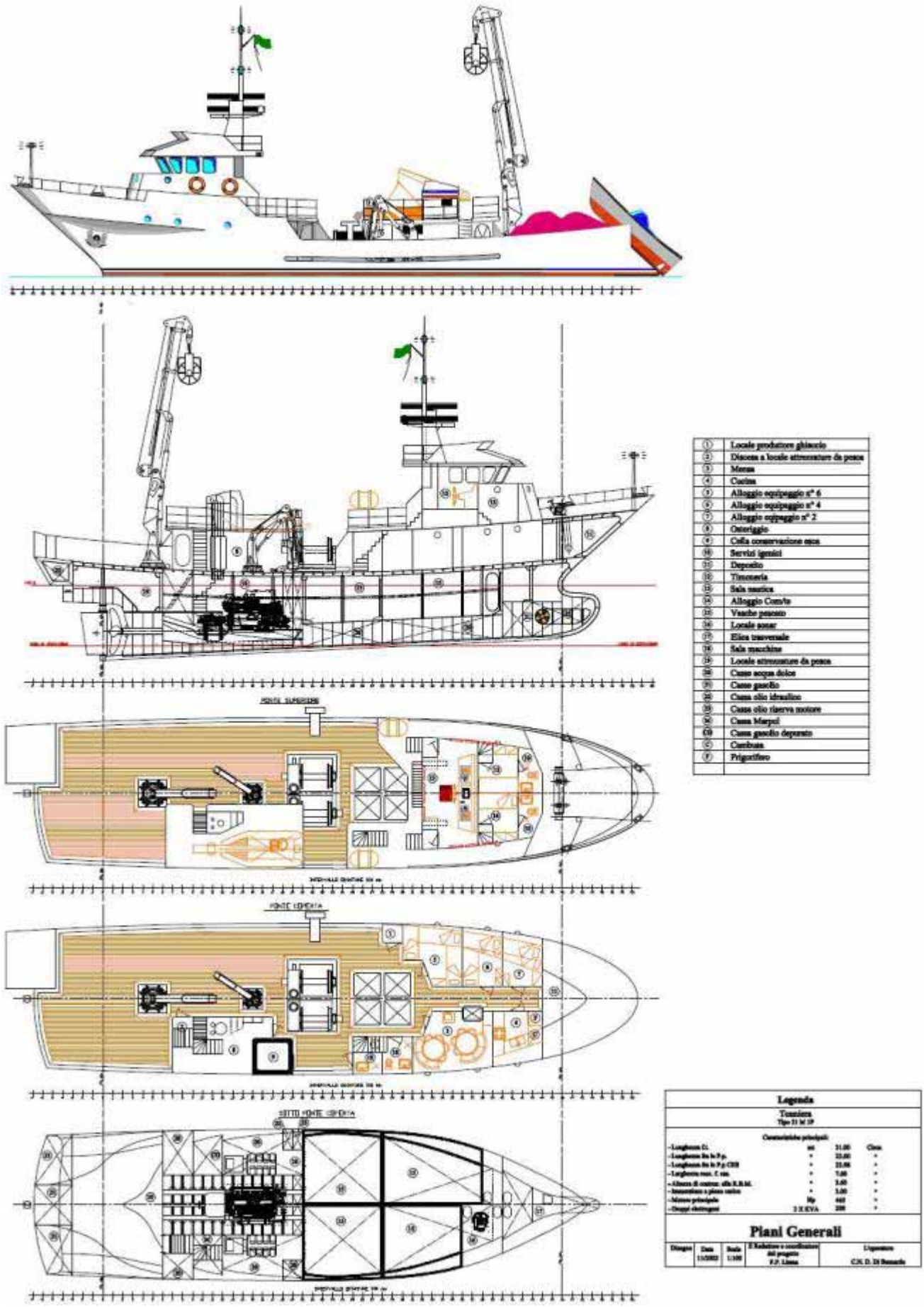


Figure: 004. Mediterranean type (LOA: 31m) Italian BFT PS tuna fishing vessel, projected by: NavalDesign & built by Cantiere navale “IL CARPENTIERE” di Asaro S.&C. s.n.c., Mazara del Vallo (TP) Italy.

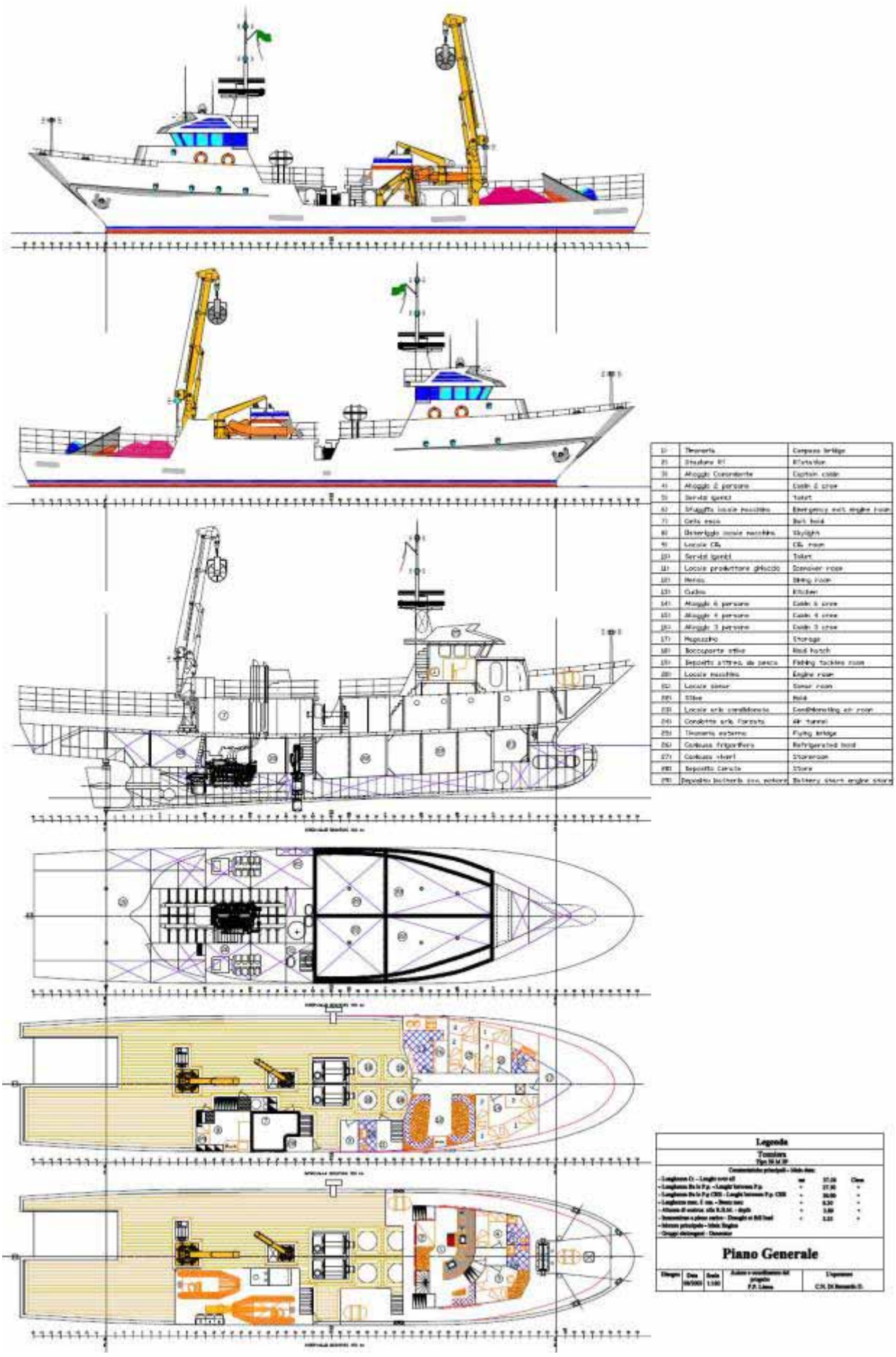


Figure: 005. Mediterranean type (LOA: 38m) Italian BFT PS tuna fishing vessel, projected by: NavalDesign & built by Cantiere navale “IL CARPENTIERE” di Asaro S.&C. s.n.c., Mazara del Vallo (TP) Italy.

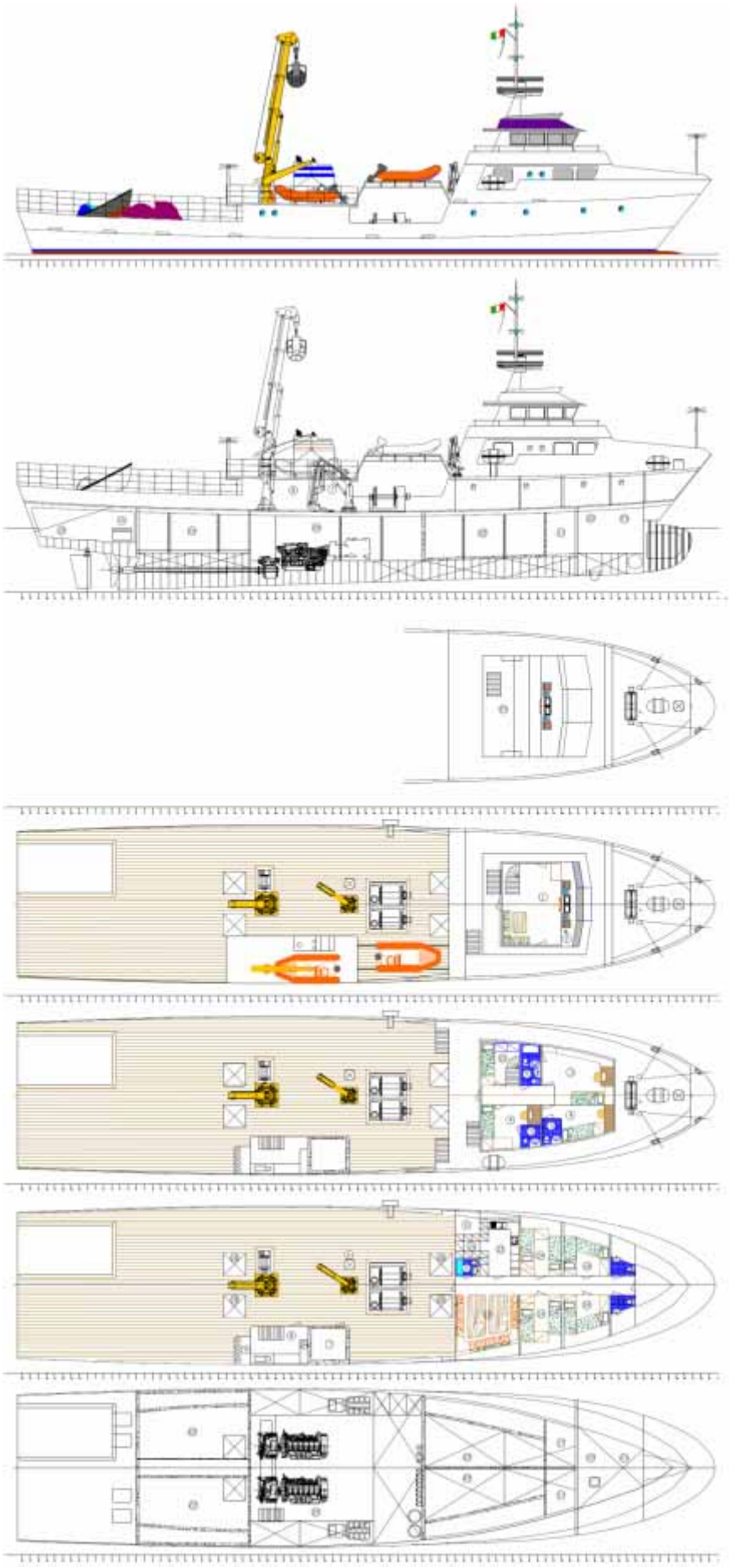
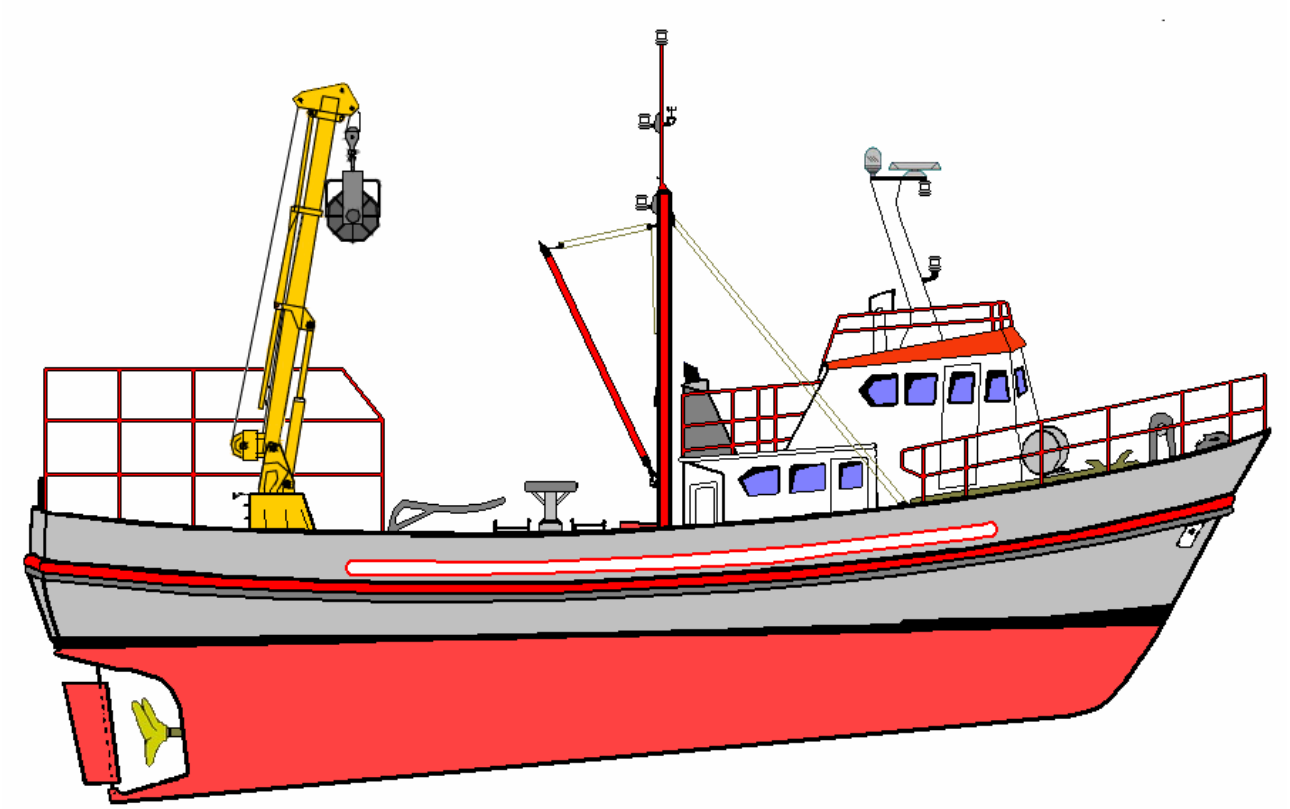


Figure: 006. Mediterranean type (LOA: 42m) Italian BFT PS tuna fishing vessel, projected by: NavalDesign, Italy.

Tunisian Traditional Type BFT PS Vessel



Typical average first generation Tunisian-built BFT PS vessel.[1]

Average LOA: 22,56m,
Average GRT: 62T,
Average Installed Power Main Engine 450hp,
Average Fuel Capacity: 12.000l,
Average Freshwater Capacity: 2.000l,
Average Fish-hold Volume: 48m³,
Average Number of Crew: 12.

[1] Source: Rapport Final des Activités de Recherche sur les Grands Pélagiques des Eaux Tunisiennes. Abdallah Hattour.

Algerian Last Generation Type BFT PS Vessels

Name: SIDMA AMAR

Flag:	Algeria
Year Built:	2007 (Turkey)
Last DD:	
GRT:	200 (Est.)
Length:	22m
Breadth	6,2m
Main Engine:	450Hp (Est.)

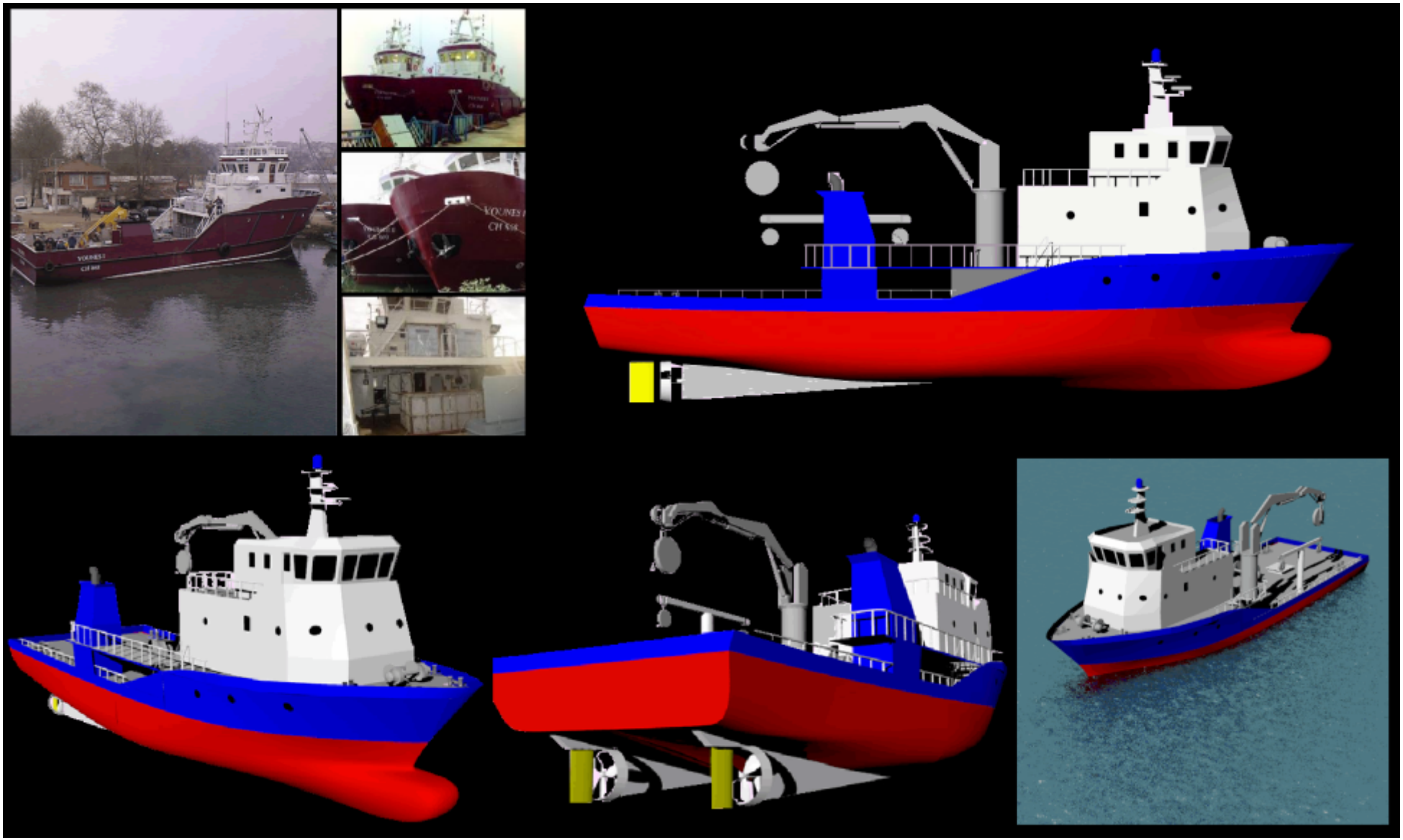


Figure: 007. Mediterranean type (LOA: 32m, GRT: 260T, Hp: 450 Est.) Algerian BFT PS tuna fishing vessels, YOUNES I & YOUNES II projected & built by: Seft, GEMİ İNŞAA SANAYI MÜHENDİSLİK VE TIC.LTD.ŞTİ., Turkey, in 2006.

Croatian Last Generation Type BFT PS Vessels

Figures 008. A & B: Croatian BFT Purse Seiners NEPTUNE I and NEPTUNE II under construction, seen at Pula Croatia on September 20th 2007. Pictures ©®: Courtesy by: Siniša Jakšić.

LOA: 40,15m
Breadth: 8,65m
Height: 4,20m
Main engine:1600kW
Speed: 14,5kn
Crew: 12 members
Fish holds: one dry and refrigerated to -20ºC, and one containing sea water cooled down to 0°C.
1800m long x 300m high x 20Mt weight purse seine net onboard.

Model tests performed at Brodarski Institute's hydrodynamic facilities have shown that the vessel will be capable of sailing at Sea State 5, i.e. at significant wave height of 2.5 metres.

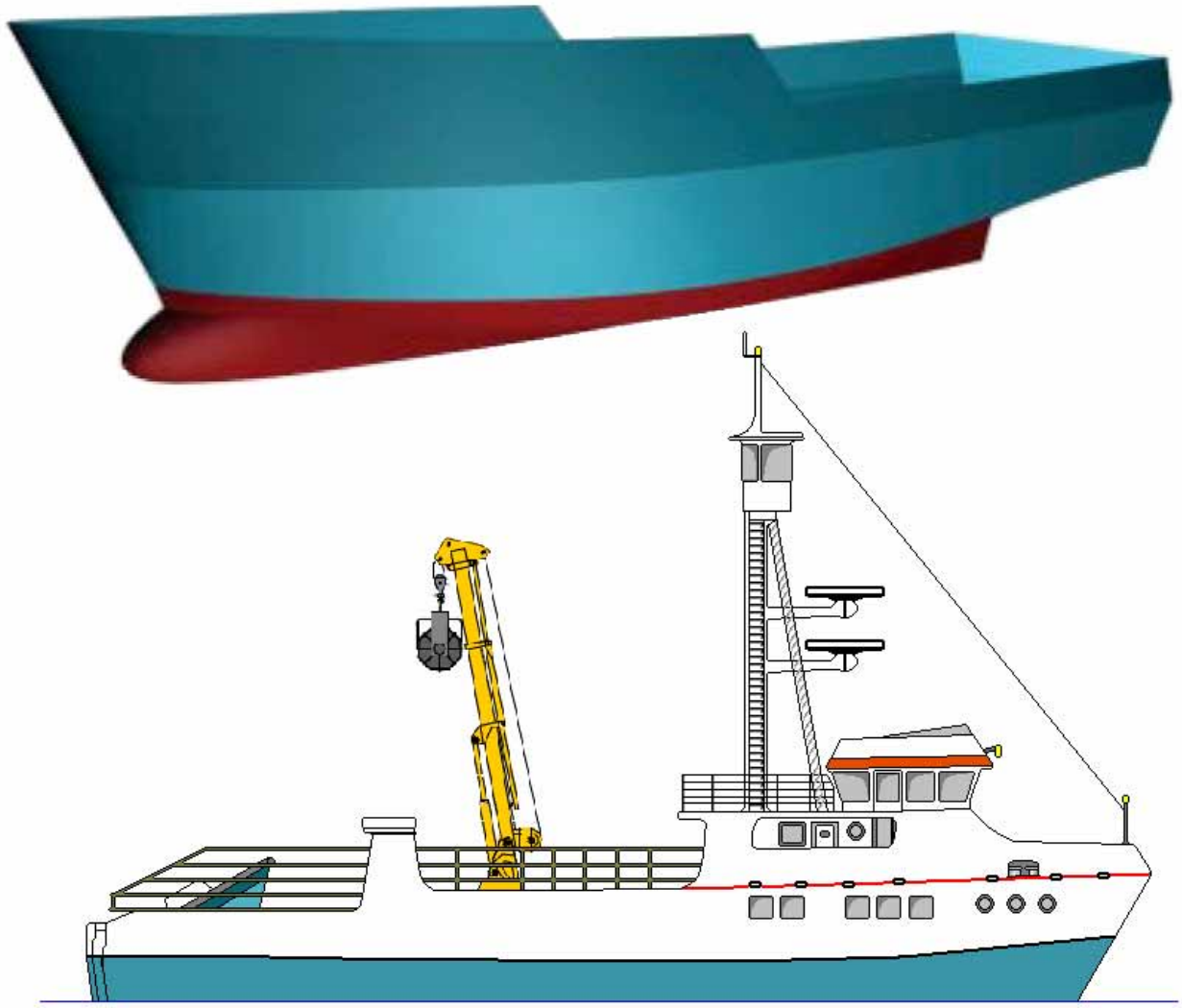
Designer: Teo Žuvela, BSc.naval architect from Brodarski Institute.

Builder: Tehnomont Pula shipyard, for Solin-Croatia-based BFT fishing operator Conex-Trade.

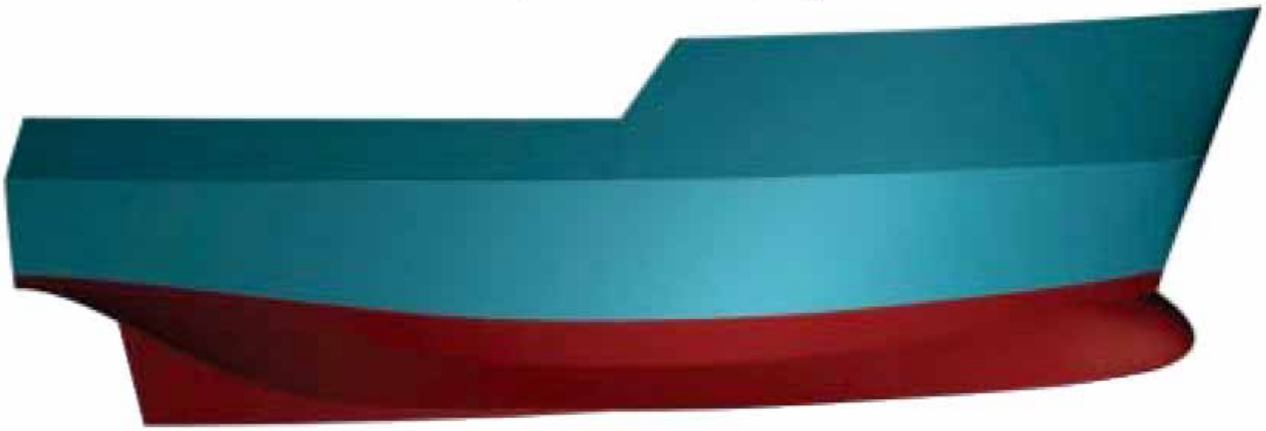
Official keel laying held at *Tehnomont* Shipyard in Pula on 11.05.2006.

NEPTUNE I was launched on 15.11.2006 at the R.L.E. Shipyard in Vranjic.

Both ships (Total value of each vessel, without full equipment, amounts to € 2.2 million) are the first from a series of four BFT PS fishing vessels from the Croatian Government's programme on funding the renewal and modernization of the Croatian fishing fleet.



PROJEKT PLIVARIČARA DUGOG 34 METRA ZA 12 ČLANOVA POSADE:
Ribari će na njemu moći ribariti i po mjesec dana



TRUP RIBARICE: Projekt plivaričara

Turkish Standard Type BFT PS Vessels

Flag:	Turkish
Year Built:	2003
Last DD:	2005
GRT:	432
Length:	49
Breadth	13
Draft:	
Speed:	
Range:	
Cargo Capacity	250 Tons
Ice Maker:	
Main Engine:	Caterpillar V12 3512 1600 HP 2 - Iveco 850 HP
Generators:	3 - Iveco 200 KW, 114 KW, 35 KW
Steering:	Hydraulic
Crane:	
Winches:	
Refrigeration:	
Fuel Capacity:	100 Tons
Radar:	Anritsu
Satallite:	
Gyro:	
ECDIS:	
Autopilot:	
Sonar:	
RDF:	
Radios:	
Other Electronics:	Complete Package

Flag:	Turkish
Year Built:	2006
Last DD:	
GRT:	620
Length:	50,65
Breadth	14,3
Draft:	5,2
Speed:	14 knots
Range:	
Cargo Capacity	300 Tons
Ice Maker:	
Main Engine:	1 - Mitsubishi - 1416 HP 2 - Iveco - 850 HP Each
Generators:	1 - 125 kw Iveco, 1 - 110 kw Volvo, 1 - 160 kw Volvo, 1 - 40 kw Perkins
Steering:	Hydraulic
Crane:	1.5 Ton Capacity
Winches:	2 Hydraulic Windlass
Refrigeration:	3 - Mitsubishi Refrigeration units to - 25 degrees Cº
Fuel Capacity:	120,000 Liters/120 Tons
Radar:	Yes
Satallite:	2 - JRC
Gyro:	
ECDIS:	
Autopilot:	Yes
Sonar:	2 - KAIJO
RDF:	
Radios:	
Other Electronics:	

Flag:	Turkish
Year Built:	2000
Last DD:	
GRT:	296
Length:	44
Breadth	12
Draft:	2' 20"
Speed:	
Range:	
Cargo Capacity	
Ice Maker:	2.5 tons/day
Main Engine:	2 x Diesel - Shaft drive. daewoo 2 x 700 hp 4:1 2003 & 2004 models.
Generators:	125 kw & 50 kw generators
Steering:	Hydraulic
Crane:	
Winches:	
Refrigeration:	
Fuel Capacity:	
Radar:	furuno radars ssv 84 , gsh 70
Satallite:	
Gyro:	
ECDIS:	
Autopilot:	
Sonar:	
RDF:	
Radios:	vhf
Other Electronics:	
Skiff:	2 boats length 9 meters each (380hp volvo -350 hp Iveco)

Flag:	Turkish
Year Built:	2006
Last DD:	
GRT:	
Length:	42
Breadth	14
Draft:	
Speed:	
Range:	
Cargo Capacity	
Ice Maker:	2.5 tons/day
Main Engine:	3 x 720 HP Daewoo Man.
Generators:	1 x 220 Kwa Daewoo Man. 1 x 70 Kwa Daewoo Man
Steering:	Hydraulic
Crane:	
Winches:	
Refrigeration:	
Fuel Capacity:	
Radar:	
Satallite:	
Gyro:	
ECDIS:	
Autopilot:	
Sonar:	
RDF:	

TYPE : PURSE SEINER
FLAG : TURKEY
BUILT : 2005/TURKEY
LOA : 44 MT
BREATH : 14 MT
DEPTH : 2,30
DRAFT : 3.50 Mt
M/ENGINE : 2 X IVECO 850 HP V12
HYDRAULIC ENGINE : 1X 450 HP IVECO - 1X 180 HP PERKINS
GENERATOR : 1X 110 KWA IVECO - 1X 66 KWA IVECO
NAVIGATION EQUIPMENT : 1X ECHO SOUNDER(JRC-250) - 1X SSB(JRC)
: 1X RADAR(JRC-NCE 7640) 120 miles - VHF ICON
: 1X AUTOPLOT(NAVITRON)-1XPLOTTER
: 1XSONAR FURUNO CH-84 - 1X DOPLER JRC-628
COLD STORE : 1X 800 BOX(-5) - 1X 200 BOX (-5)
ICE MACHINE : 1X 3 TONNES/HRS
FISH HOLD : 2X 60 M3
FUEL : 70 TON
WATER : 25 TON
NET WHINCH : 2X HYDROLIC SEINER WHINCH
SPEED : 12,5 KNOTS
SAINNER BOATS : 2X LOA-10 MT/BR 4 MT (1X450 IVECO-1X240 LEYLAND)
ACCOMODATION : 35 PERSON

TYPE : PURSE SEINER
FLAG : TURKEY
BUILT : 2004
LOA : 45 mt
BREATH : 14 mt
M/ENGINE : 3 X DAEWOO 725 HP
HYDRAULIC ENGINE : 1X MAN 1X FORD
GENERATOR : 2X IVECO
NAVIGATION EQUIPMENT : 1X SONAR C24 FURUNO-RADAR 72 MİL
: 1X SONAR KAIJO - 2X COLOR ECHOSOUNDER
: 1X SATELITE-1X AUTOPLOT-1X DOPPLER SONAR JRC
COLD STORE : COLD STORE
ICE MACHINE : ICE MACHINE
FUEL : 50 TON
WATER : 20 TON
FISH NETS : 1X TUNA FİSH NET(NEW) LOA-1800 MT BR-200 MTR
NET WHINCH : HYDROULIC SAINNER WHINCH
SPEED : 13-14 KNOTS
ANCHOR : HYDROULIC
SAINNER BOATS : 2 SKIFS BOAT
CABINS : 4 PCS CAPTAIN ROOMS
ACCOMODATION : 30 PERSONS
LOCATION : ISTANBUL
OTHER DETAILS : 1X TV - 1X COMPUTER - 1X FAX RECEIVER

OTHER DETAILS : YEAR OF BUILD : 2005
LGT : 46 MT
BRD : 14 MT
G.R.T : 479
N.R.T : 144
SPEED : 14 KNOT
MAIN ENGINE : 3x DAEWOO (720 HP)(1800 RPM)
FUEL CONSUMPTION : 380 lt continuous – 250 lt light
FUEL CAPACITY : 70 TON
WATER CAPACITY : 70 TON
JENERATOR : 2X 70 Kwa (IVECO-DAEWOO)
HYDRAULIC ENGINE : 1X 240 HP DAEWOO
MECHANICAL ENGINE : 1X 190 HP DELFIN
HYDRAULIC SAINNER
WHINCH : 2 PCS
SMALL WHINCH : 2 PCS (10 TON)
SMALL WHINCH
DIFFERENT TO WORK : 2 PCS (5 TON)
ANCHOR WHINCH : 1 PCS (730 KG ANCHOR)
CHAIN : 150 MT CHAIN 32 mm
ICE MACHINE : 24 HRS/ 3 TON (STAF)
COLD STORE : 1000 BOX or 20 TON (- 17 °C)
SKIF BOAT : 2 PCS (1X VOLVO 450 HP – 1X PERKINS 200 HP)
AIR CONDITIONER : 1 PCS
CABESTAN : 4 PCS (5 TON)
POWER BLOCK : 3 PCS (BIG)
FISH PUMP : 2 PCS
ELECTRICAL RUDDER : 4 PCS
ACCOMMODATION : 25 PERSON
CAPTAIN CABIN : 4
ELECTRONICS
1X KODEN RADAR 96 MILLES
1X SEIWA SATELITE
1X SUZUKI SONAR 300 MT (S-1600M15)
1X KAIJO SONAR 10.000 MT (KCS-2200Z)
1X KAIJO SONAR 3.000 MT (KCS–2880)
1X JRC ECHOSOUNDER VERTICAL (JFW–250)
1X SUZUKI ECHOSOUNDER VERTICAL (ES–8100)
1X KAIJO DOPPLER (DCG-100)
1X COMPUTER AND CAMERA SYSTEM
1X ICOM VHF
1X JRC SSB
1X SAURA AUTOPLOT (SA-10)
1X MARINE COMMUNICATION AMPLIFIER)
1500 MTR LENGHT 300 MTR BREADTH TUNA NET

TYPE : PURSE SEINER
FLAG : TC
BUILT : 1992/TURKEY
LOA : 25.50 MT
BREATH : 7.20 MT
M/ENGINE : 1X CAT 487 HP
GEAR BOX : 4/1 TWİNDİSC
GENERATOR : 20 KWA PERKINS (85 HP)
NAVIGATION EQUIPMENT : 2X ECHO SOUNDER(SUZUKİ) 1X 1KW - 1X 3 KW
: 1X RADAR 36 miles (ANRİTSU)-1X VHF (İCOM)
: 1X SONAR (FURUNO CH 14) 160 HZ
: 1X SONAR (SUZUKİ 1600 S) 180 HZ / 1X GPS SEİWA
FUEL : 22 M3
WATER : 2 M3
FISH NETS : 720X125 METER SARDINE FISH NET
NET WHINCH : HYDROLIC SEINER WHINCH
SPEED : 12,5 KNOTS
ANCHOR : 150 KG ANCHOR
ACCOMODATION : 21 PERSONS
LOCATION : İSTANBUL

TYPE : PURSE SEINER
FLAG : TURKEY
BUILT : 1997
LOA : 32,50 MT
BREATH : 8,80 MT
DEPTH : 3 MT
M/ENGINE : 1X IVECO 500 HP
GENERATOR : 1X 50 KWA 85 HP FORD
NAVIGATION EQUIPMENT : 1X ECHO SOUNDER (Suziki)
: 1X RADAR 60miles (Anjitsu)
: 1X VHF (Icom)
: 1X GPS (Suzuki)
FUEL : 70 M3
WATER : 40 M3
SAINNER BOATS : 1X LOA-8,5 MT (1X220 DELFIN)
ACCOMODATION : 30 PERSONS

Turkish Latest Generation Type BFT PS Vessels (Under Construction)

25,50m BFT PS vessel OSMAN SERTER I under construction Turkey 2007.

40,20m BFT PS vessel KASIMOĞULLARI 4 under construction Turkey 2007.

45m BFT PS vessel under construction Turkey 2007.

46,00m BFT PS vessel FATOGLU BALIKCILIK under construction Turkey 2007.

Turkish Future Generation Type BFT PS Vessels

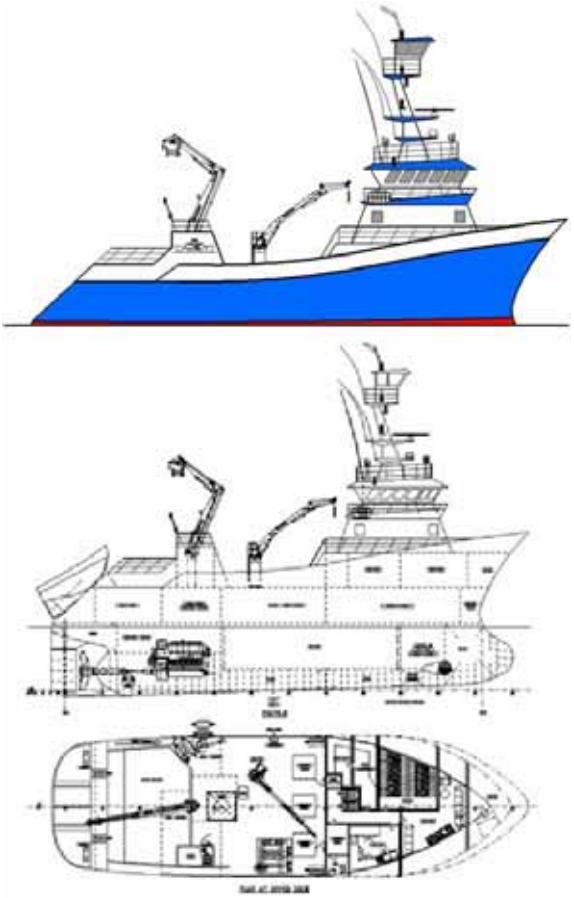
Figures 009: Sketches of Turkish modern BFT PS vessels by KETENCİLER SHIP BUILDING, Bursa Karacabey region, Turkey. This shipyard will start working by April 2008 under the name Saban Denizcilik Ltd.

Figures 010: Sketches of Turkish modern BFT PS vessels by KETENCİLER SHIP BUILDING, Bursa Karacabey region, Turkey. This shipyard will start working by April 2008 under the name Saban Denizcilik Ltd.

Other BFT PS Vessel Designs

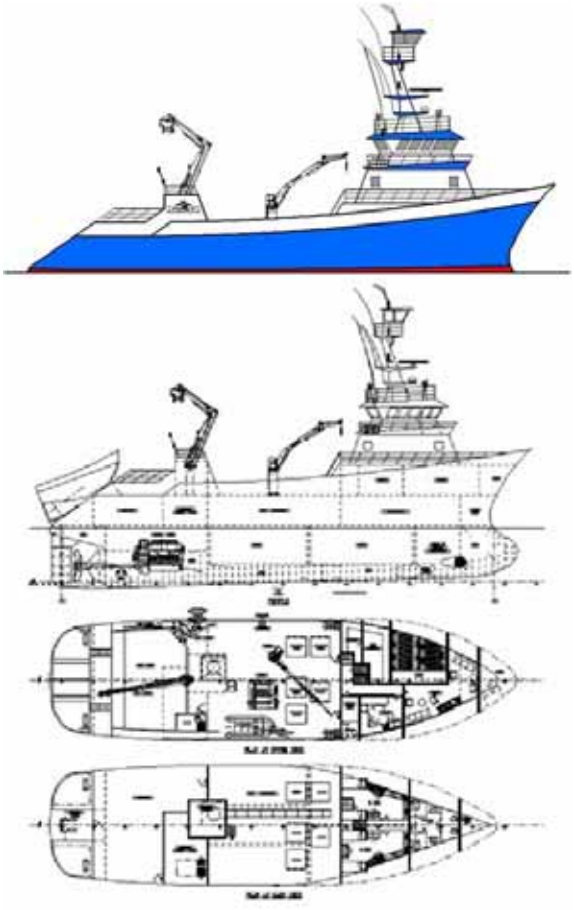
32.00m Tuna Purse Seiner Macduff Ship design

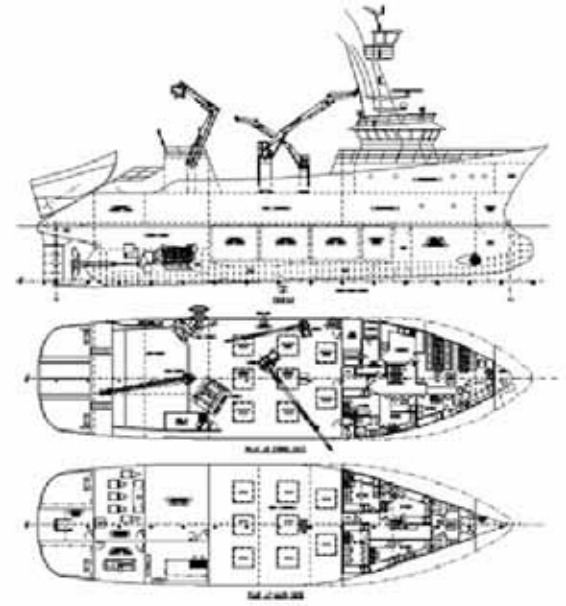
Length Overall:	32.00m
Length B.P.	28.00m
Breadth Mld.	9.50m
Depth Mld.	4.50m
Main Engine:	2000hp @ 1000rpm
Propeller Diameter:	2600mm
Bollard Pull:	25 tonne
DECK MACHINERY:	Purse Winch
	Fish Pump
	Net Stacker
	Cranes
	Skiff
CAPACITIES	Oil Fuel: 80,000 litres
	Fresh Water: 25,000 litres
	Fish Room: 270cu.m
	Crew: 16 men



38.00m Tuna Purse Seiner Macduff Ship design

Length Overall:	38.00m
Length B.P.	28.00m
Breadth Mld.	9.50m
Depth Mld.	4.50m
Main Engine:	2000hp @ 1000rpm
Propeller Diameter:	2600mm
Bollard Pull:	25 tonne
DECK MACHINERY:	Purse Winch
	Fish Pump
	Net Stacker
	Cranes
	Skiff
CAPACITIES	Oil Fuel: 80,000 litres
	Fresh Water: 25,000 litres
	Fish Room: 340cu.m
	Crew: 16 men



40.00m Tuna Purse Seiner Macduff Ship design

Length Overall:	40.00m
Length B.P.	35,70m
Breadth Mld.	10,00m
Depth Mld.	4.50m
Main Engine:	2500hp @ 1000rpm
Propeller Diameter:	2600mm
Bollard Pull:	28 tonne
DECK MACHINERY:	Purse Winch
	Fish Pump
	Net Stacker
	Cranes
	Skiff
CAPACITIES	Oil Fuel: 100,000 litres
	Fresh Water: 30,000 litres
	Fish Room: 300cu.m
	Crew: 17 men